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**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Docket Number (Optional)

UTSL:058US

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

on April 7, 2006

Signature

Typed or printed name Mark T. Garrett

Application Number

09/707,435

Filed

November 6, 2000

First Named Inventor

Debra D. Wawro

Art Unit

2882

Examiner

Chih-Cheng G. Kao

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

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applicant/inventor.

☐

assignee of record of the entire interest.  
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

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attorney or agent of record.

Registration number 44,699☐

attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 \_\_\_\_\_

Signature

Mark T. Garrett

Typed or printed name

(512) 536-3031

Telephone number

April 7, 2006

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below".

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\*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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## **Arguments in Support of Pre-Appeal Brief Request for 09/707,435**

### **I. The Anticipation Rejection of Independent Claims 1, 15, 35 and 38 and Their Rejected Dependent Claims over the '300 Patent Is Without Factual Support**

Independent claims 1, 15, and 35 each recites at least one waveguide having an end that has an endface, and a guided-mode resonance waveguide grating fabricated on the endface. Claim 38 recites providing such a waveguide and fabricating such a guided-mode resonance waveguide grating on the endface of the waveguide. The Office points to FIG. 1 of the '300 patent and asserts, with no supporting evidence, that layer  $d_1$  from the filter in that figure qualifies as the claimed waveguide and that the layers from " $d_{n-1}$  to  $d_{n+1}$ " qualify as the claimed guided-mode resonance waveguide grating.

Applicants explained in section D.1 on pages 10 and 11 of the last response (and in a declaration from one of the named inventors of the current application and the cited reference) that the Office's position is factually flawed because the filter on which the Office relies qualifies as the claimed guided-mode resonance waveguide grating *only*, not as both the claimed guided-mode resonance waveguide grating *and* the claimed waveguide. Trying to divide the filter in FIG. 1 into both the claimed guided-mode resonance waveguide grating *and* the claimed waveguide by removing layer  $d_1$  will result in the remaining portion of the filter losing its originally-intended functionality, and will not necessarily result (as it must for anticipation to exist) in a filter that functions as any type of guided-mode resonance waveguide grating. Thus, anticipation has not been established.

The Office's rebuttal on page 14 of the Final Action that it "has interpreted the claim to read on a waveguide being part of the grating[.]" to the extent Applicants understand the assertion, is inconsistent with the manner in which the waveguide and the guide-mode resonance waveguide grating have been claimed: as two separate structures.

## **II. The Anticipation Rejection of Dependent Claims 3 and 23 over the '300 Patent Is Without Factual Support for an Additional Reason**

The Office has not identified in the '300 Patent a waveguide that is rectangular in shape, as claimed. Instead, the Office points to the *cross-section* of layer  $d_1$  from FIG. 1 of the '300 patent and claims the waveguide from which that cross-section was taken is necessarily rectangular. That amounts to pointing to the cross-section of a disc (imagine a hockey puck) and claiming the disc is rectangular in shape. It simply is not so.

## **III. The Anticipation Rejection of Independent Claims 1 and 38 and Their Rejected Dependent Claims Is Without Factual Support**

Applicants explain why the Office's rejection of these claims lacks factual support in section E.1. on pages 12-14 of the last response. Critically, the Office cites *no evidence* to support its argument that element 43 in FIG. 4B of Farah qualifies as the claimed guided-mode resonance waveguide grating.

The Office responds in the Final Office Action that Applicants are relying on limitations from the specification in making the cited argument. However, the Office's assertion is factually inaccurate when the Specification at page 16, lines 1-15 and the cited declaration are both considered.

## **IV. The Obviousness Rejection of Independent Claims 1, 15, 35 and 38 and Dependent Claims 3 and 4 Is Without Factual Support**

The Office asserts that element 24 from FIG. 3A and element 34 from FIG. 3E of the U.S. Patent 5,216,680 qualifies as the waveguide of each of the rejected claims. These cited features *are not* waveguides. Instead, element 24 is a "[s]ubstrate . . . [that] supports grating 10 and provides rigidity, strength, and mountability." Col. 9, lines 25-30. Similarly, element 34 is a "semiconductor substrate." Col. 10, lines 50-64; *see also* col. 9, lines 34-36. Thus, the Office has failed to identify the claimed waveguide in the cited references.

**V. The Obviousness Rejections in Paragraphs 22 – 31 Are Without Factual Support**

The obviousness rejections set forth in paragraphs 22-31 on pages 7-13 of the Final Office Action are based on the '300 patent as the principal reference. However, that position is factually flawed for the same reasons set forth above in section I. of this paper, and is not cured by any of the additionally-cited references.